

IN THE COMMUNITY

PUBLIC TOURS

Louisville Water offers free tours of its historic and current facilities. Learn how we made drinking water 150 years ago and about the advanced technology used to provide great-tasting tap water today. Contact Public Information two days in advance for groups of 10 or more or if wheel-chair accessibility is needed. Email publicinfo@lwcky.com or call (502) 569-3600. Note: Lightning will cancel tours.

Walking Wednesdays

Located at the Crescent Hill Gatehouse on Reservoir Avenue, just off Frankfort Avenue.

May 11 – September 28, 2011
Two sessions each Wednesday: 11am-1pm and 6-8pm

Step inside the Crescent Hill Gatehouse and explore the fascinating history of Louisville Water through drawings, photographs and film. Afterwards, walk around the Reservoir, one of the city’s favorite recreations since 1879.

Tour the Tower

Located at River Road and Zorn Avenue.
Saturday, June 25 10am - noon Tuesday, June 28 6-8 pm
Saturday, July 16 10am - noon Tuesday, July 19 6-8 pm

Louisville Water’s original pump station and water tower are a National Historic Landmark. Constructed in 1860, this facility has survived tornados, flooding and the scrap



yard of World War II. The tour will take you back to the early days of operation and show you how we turn Ohio River water into clean drinking water.

EDUCATION PROGRAMS



Our Adventures in Water program provides in-class and field trip educational opportunities to schools. The program meets state curriculum guidelines and incorporates hands-on activities to make learning fun. Teachers can schedule a free program or download educational resources from tappersfunzone.com.

CORPORATE GIVING

Each year, Louisville Water provides Pure Tap® to hundreds of organizations including the American Red Cross, Kentucky Derby Festival and other community events.

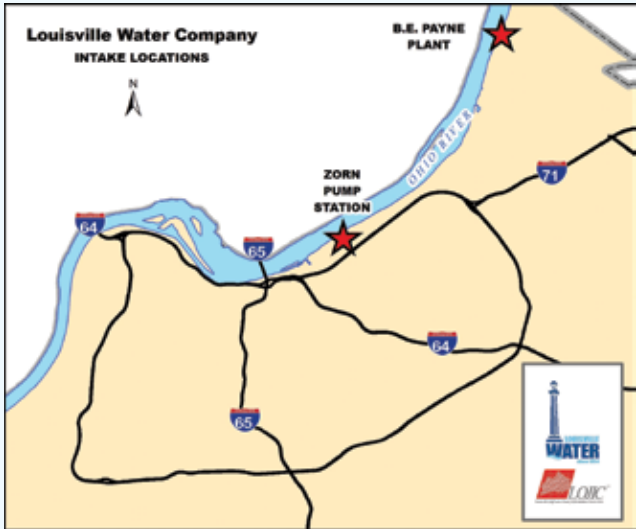
In 2010, our employees volunteered over 5,400 service hours to local and national charitable organizations. Employees donated over \$166,000 to benefit Fund For the Arts, Metro United Way and Water For People.




THE SOURCE

Louisville Water Company (LWC) is the public water supplier of Louisville Metro and parts of Bullitt and Oldham Counties. The Ohio River is the source for your drinking water. LWC operates two surface water treatment plants with intakes on the Ohio River. In October 2003, the Kentucky Division of Water approved a Source Water Assessment and Protection Plan for Jefferson County. The plan looks at LWC’s susceptibility to potential sources of contamination. The plan identified spills of hazardous materials on the Ohio River and permitted discharges of sanitary sewers as the highest contamination risks. In Jefferson County, land use in the protection area is primarily zoned for residential and commercial use, with only a few industrial sites. In Oldham and Trimble Counties (areas bordering the Ohio River to the north of our intakes) land use is primarily zoned for residential and agricultural use. Therefore, source water contamination risks are relatively low. LWC maintains an Emergency Preparedness and Disaster Services Plan to address potential contamination risks. To view the entire Source Water Assessment and Protection Plan contact Jim Smith at (502) 569-3687.

LWC also draws water through the aquifer with riverbank filtration wells at the B.E. Payne Plant. Therefore, protecting



the water deep in the ground is important. The Kentucky Division of Water approved LWC’s Wellhead Protection Plan (WHPP) in 2004. The goal is to safeguard groundwater feeding into the wells from contamination within the Wellhead Protection Area (WHPA) in Prospect. LWC continually updates the plan. New residents and businesses in the WHPA receive information about the WHPP and educational materials. The information is also available at louisvillewater.com. 

SMILE KENTUCKY!


Smile Kentucky! tackles what the U.S. Surgeon General calls the number one common, chronic childhood disease—tooth decay. The partnership provides free oral health screenings and education focused on proper brushing and flossing, the importance of fluoride, and how to identify the amount of sugar in snacks.



Established in 2002, Smile Kentucky! is considered a national model for com-

munity partnerships. Over 121,000 Kentucky children have taken part in education programs, 32,000 have received dental screenings, and 2,600 have received free dental treatment valued in excess of \$900,000.

TAP INTO FITNESS!

Tap into Fitness! is a community partnership that works to improve the overall health and fitness of children in elementary school. Tests show that the program helps reduce the percentage of children who are overweight, and increases their knowledge of nutrition and physical fitness. 

View this report online at louisvillewater.com.

QUESTIONS ABOUT THIS REPORT?

Contact Kelley Dearing Smith, Public Information Officer, by phone at (502) 569-3695 or send an email to ksmith@lwcky.com.

CUSTOMER INPUT

Our Customer Advisory Council meets bimonthly. The Board of Water Works meets the second Tuesday of each month at 12:30pm at 550 South Third Street in Louisville.

ACCOUNT SERVICES

Customers can access their accounts 24/7 online at louisvillewater.com. Call our Automated Customer Service at (502) 583-6610 or toll free at (888) 535-6262. Access your billing and water usage history, make payments, and more. To speak with a Customer Care Representative, please call during business hours, Monday - Friday, 8am - 7pm.

WALK-IN CUSTOMER SERVICE

Monday—Friday, 8am - 5pm

Corporate Headquarters	Bullitt County Office
550 South Third Street	3396 Burkland Boulevard
Louisville, KY 40202	Shepherdsville, KY 40165



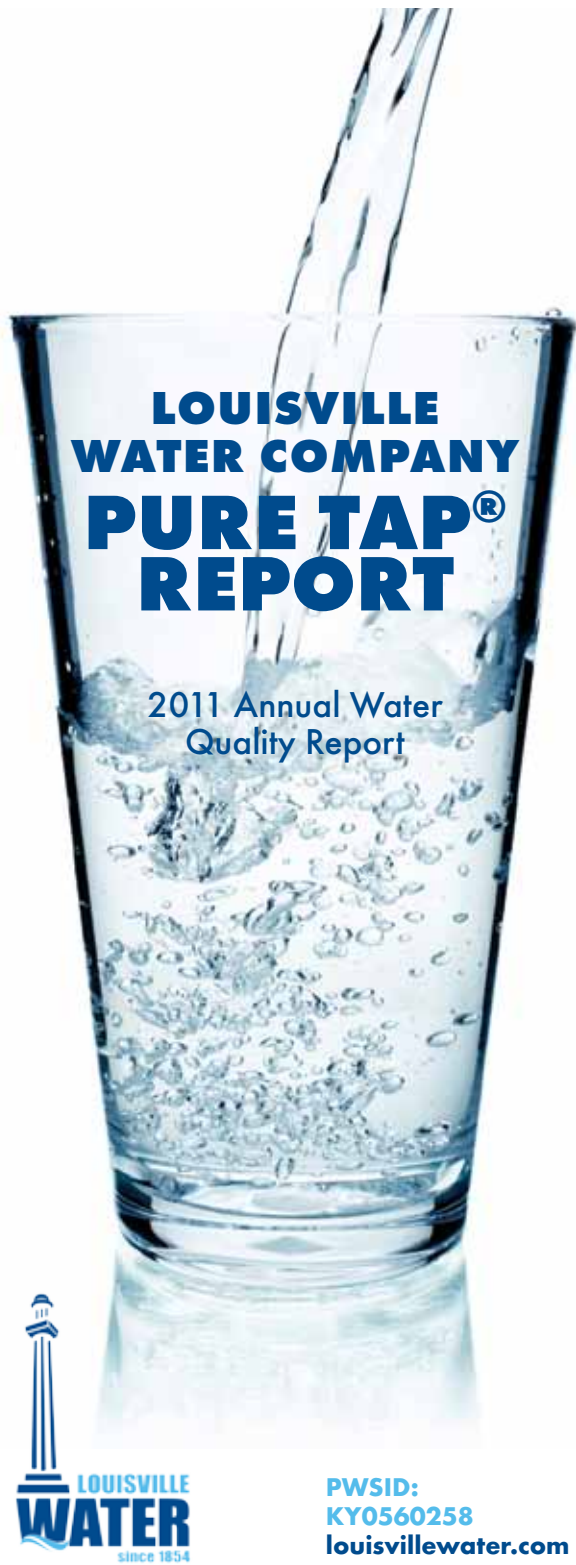
Download our free mobile application from louisvilleky.gov/mobileapps.



Find us on Facebook.



Follow us on Twitter.



QUALITY, INNOVATION AND VALUE

Louisville Water Company’s Pure Tap® Report informs you about your drinking water, Pure Tap®, and our commitment to quality, innovation and value. Louisville Water prepares this annual water quality report to meet Environmental Protection Agency (EPA) requirements under the Safe Drinking Water Act Amendment. Pure Tap® surpasses the EPA’s strict health standards.

Every day, Louisville Water provides 127 million gallons of high quality Pure Tap® to over 850,000 people in Louisville Metro and parts of Bullitt, Nelson, Oldham, Shelby and Spencer counties. Our water tastes so good it won the “Taste Test” competition conducted by the Kentucky/Tennessee Section of the American Water Works Association (AWWA) for the third time since 2007. AWWA recognized our water as the “Best Tasting Tap Water in America” in 2008.

With two treatment plants drawing from the Ohio River, Louisville Water has an abundant supply. Each day, the Crescent Hill Water Treatment Plant can supply up to 180 million gallons and the B.E. Payne Water Treatment Plant can supply up to 60 million gallons of drinking water. Both plants are recognized by the Partnership for Safe Water and have received the Ten-Year Directors Award.

In 2010, Louisville Water celebrated 150 years of service. Learn how we are continuing our long-standing tradition of developing cutting edge water treatment technology.

CRESCENT HILL WATER TREATMENT PLANT

We are in the midst of a large-scale renovation at the Crescent Hill Water Treatment Plant. The scope touches on almost every aspect of water treatment at the plant and will modernize this 100-year-old facility. The work is



Renovation of the Crescent Hill filter beds

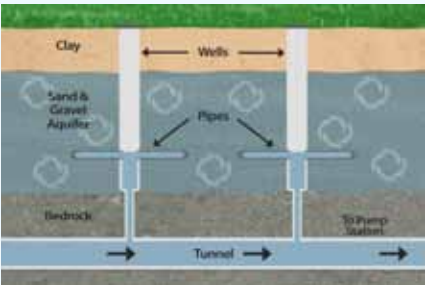
being done in phases as not to disrupt the critical water treatment processes.

The project includes a new chlorine generation facility that allows us to produce our own disinfectant, using salt and electricity. This replaces the need for liquid chlorine deliveries and is safer for the community.

B.E. PAYNE WATER TREATMENT PLANT


The Partnership for Safe Water recognized the B.E. Payne Water Treatment Plant with its Phase IV Excellence in Water Treatment award. This plant is one of only eight treatment plants in the country to achieve this status—the highest recognition in the Partnership program.

Our innovative Riverbank Filtration project, illustrated below, became part of the water treatment process at the plant in December 2010. This green approach uses the sand and gravel in the earth as a natural filter. Four wells pull



up to 70 million gallons of water a day from the ground. The water is collected in a 1.5 mile long tunnel that is 150 feet deep

in the bedrock. Louisville Water is the first utility in the world to combine the tunnel and well technology as a source for drinking water.

The American Society of Civil Engineers honored the Riverbank Filtration project with its Outstanding Civil Engineering Achievement award. The award honors projects that best illustrate superior civil engineering skills and represent a significant contribution to civil engineering progress and society. Riverbank Filtration was one of five international projects nominated for this award. 

LOUISVILLE WATER COMPANY’S 2010 WATER QUALITY DATA

Data is from testing done in 2010, unless otherwise noted, in accordance with 401 KAR Chapter 8. All results exceed EPA guidelines.

Regulated Contaminants - Substances subjected to a Maximum Contaminant Level (MCL), Action Level (AL), or Treatment Technique (TT). These standards protect drinking water by limiting the amount of certain substances that can adversely affect public health.

Water Quality Data 2010			Crescent Hill Filter Plant (CHFP)			B. E. Payne Water Treatment Plant (BEP)				
Substance (units)	MCL	MCLG	CHFP Average	Highest Level Detected	Range of Detections	BEP Average	Highest Level Detected	Range of Detections	Compliance Achieved	Typical Source of Contamination (for more details, visit www.epa.gov/safewater/hfacts.html)
INORGANIC										
Fluoride (ppm)	4	4	0.95	1.03	0.82 - 1.03	1.01	1.17	0.90 - 1.17	YES	Additive that promotes strong teeth. Fertilizer & aluminum factories. Erosion of natural deposits.
Nickel (ppb)	* n/a	n/a	1.9	1.9	one measurement	BDL	BDL	one measurement	YES	Runoff from landfills & cropland. Metal refineries & factories. Erosion of natural deposits.
Nitrate (ppm)	10	10	1.2	1.5	1.0 - 1.5	0.8	1.1	0.4 - 1.1	YES	Runoff from fertilizer & leaching from septic tanks. Erosion of natural deposits.
Nitrite (ppm)	1	1	BDL	0.01	BDL - 0.01	BDL	BDL	BDL	YES	Runoff from fertilizer & leaching from septic tanks. Erosion of natural deposits.
Turbidity (NTU)	TT 100% ≤ 1.0 and 95% ≤ 0.3	n/a	0.04	0.10 (100% ≤ 0.3)	0.01 - 0.10	0.04	0.09 (100% ≤ 0.3)	0.02 - 0.09	YES	Soil runoff.

* The MCL for Nickel was remanded by USEPA in February 1995.

ORGANIC										
Atrazine (ppb)	3	3	BDL	0.50	BDL - 0.50	BDL	0.26	BDL - 0.26	YES	Runoff from herbicide used on row crops.
Total Organic Carbon (Removal Ratio)	TT (≥ 1.00)	n/a	1.38	Lowest RAA Removal Ratio 1.30	0.83 - 2.05	1.29	Lowest RAA Removal Ratio 1.14	1.00 - 2.14	YES	Naturally present in the environment.
Total Organic Carbon (TOC) occurs in source waters from natural substances such as decayed leaves and animal wastes. It can combine with chlorine used in disinfection to form disinfection byproducts. TOC is measured in parts per million (ppm) but compliance with the treatment technique (TT) is based on a running annual average (RAA) of the monthly ratios of the percent TOC treatment removal compared to the required removal. A minimum annual average ratio of 1.00 is required. In 2010, LWC met the TOC treatment technique requirement.										
RADIONUCLIDES										
Uranium (µg/L)	30	0	0.29	0.29	one measurement	0.29	0.29	one measurement	YES	Erosion of natural deposits.
Alpha Emitters (pCi/L)	15	0	2.1	2.1	one measurement	2.4	2.4	one measurement	YES	Erosion of natural deposits.
Combined Radium (pCi/L) (measured as Radium-226 & -228)	5	0	0.28	0.28	one measurement	0.68	0.68	one measurement	YES	Erosion of natural deposits.

REGULATED SUBSTANCES - DISTRIBUTION SYSTEM										
Substance (units)	MCL	MCLG	Annual Average		Highest Level Detected	Range of Detections		Compliance Achieved	Typical Source of Contamination (for more details, visit www.epa.gov/safewater/hfacts.html)	
Total Trihalomethanes (ppb)	80	n/a	25.9 (RAA)		27.1 (RAA)	9.8 - 43.5		YES	Byproduct of drinking water disinfection.	
Haloacetic Acids (ppb)	60	n/a	16.3 (RAA)		17.9 (RAA)	4.6 - 44.0		YES	Byproduct of drinking water disinfection.	
Chloramines (ppm)	MRDL = 4	MRDLG = 4	2.7 (RAA)		2.7 (RAA)	1.0 - 3.5		YES	Water additive used to control microbes.	
Total Coliform Bacteria (% positive)	≤ 5% positive samples/month	0	0.06%		0.35%	0 - 0.35%		YES	Naturally present in the environment.	

REGULATED SUBSTANCES - AT CUSTOMER’S TAP										
Substance (units)	AL	MCLG	Highest Single Result	# Results Exceeding AL	90th Percentile	Range of Detections		Compliance Achieved	Typical Source of Contamination (for more details, visit www.epa.gov/safewater/hfacts.html)	
Copper (ppm) (2008)	AL 90% ≤ 1.3	1.3	0.47	0	0.28	0.02 - 0.47		YES	Corrosion of household plumbing systems. Erosion of natural deposits.	
Lead (ppb) (2008)	AL 90% ≤ 15	0	2770 **	4	12.7	BDL - 2770		YES	Corrosion of household plumbing systems. Erosion of natural deposits.	

Lead and copper results are from 2008 and the most recent required testing done in accordance with the regulation. All samples were taken at customer's taps meeting lead and copper plumbing and water holding time criteria. 53 sites were tested, four (4) samples exceeded the Action Level for lead; zero (0) exceeded the Action Level for copper. ** LWC immediately investigated this unusually high lead level and discovered that at the time of collection, the homeowner had a leaking meter vault which was later repaired. Of the 53 sites tested, the next highest lead level was 35.6 ppb.

Unregulated Contaminants - Substances for which EPA requires monitoring to determine where certain substances occur and whether it needs to regulate those substances.

Water Quality Data 2010			Crescent Hill Filter Plant (CHFP)			B. E. Payne Water Treatment Plant (BEP)				
Substance (units)	MCL	MCLG	CHFP Average	Highest Level Detected	Range of Detections	BEP Average	Highest Level Detected	Range of Detections	Compliance Achieved	Typical Source of Contamination (for more details, visit www.epa.gov/safewater/hfacts.html)
N-nitrosodimethylamine (NDMA) (ppt)	n/a	n/a	13.0	15.0	11.0 - 15.0	BDL	BDL	BDL	n/a	Byproduct of drinking water disinfection. Rocket fuel production.

Cryptosporidium: LWC monitors the Ohio River for Cryptosporidium, a tiny intestinal parasite often found in surface waters. Cryptosporidium can cause flu-like symptoms if ingested. In 2010, LWC analyzed 34 Ohio River samples. We detected low levels of Cryptosporidium in 3 samples with levels ranging from 0 oocysts/L to 0.148 oocysts/L. These detections were within ranges typically measured in the Ohio River. LWC optimizes its treatment processes to help ensure removal.



MESSAGE FROM THE EPA

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency’s Safe Drinking Water Hotline at (800) 426-4791.

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and may pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife;
- Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm-water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming;
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses;
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems; and

- Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791.

INFORMATION ABOUT LEAD

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Your local public water system is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline at (800) 426-4791 or at <http://www.epa.gov/safewater/lead>.

PUBLIC NOTICE OF AVAILABILITY OF DATA

In 2009 and early 2010, Louisville Water Company (PW-SID: KY0560258) completed unregulated contaminant monitoring as required by the Unregulated Contaminant Monitoring Regulation 2 (UCMR2). Unregulated con-

taminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted. Analytical results are available to the public by calling Kelley Dearing Smith at (502) 569-3695.



Crescent Hill Gatehouse and Reservoir

ADDITIONAL WATER QUALITY DATA

- Alkalinity (as CaCO3) - 75 mg/L
- pH - 8.1 Standard Units (SU)
- Calcium (as Ca) - 47 mg/L
- Magnesium (as Mg) - 11 mg/L
- Sodium (as Na) - 31 mg/L
- Sulfate - 73 mg/L
- Bicarbonate (as CaCO3) - 74 mg/L
- Chloride - 53 mg/L
- Hardness (as CaCO3) - 159 mg/L (9.3 grains/gallon)

Data is an average of Crescent Hill and B.E. Payne Water Treatment Plants.

Spanish (Español) Este informe contiene información muy importante sobre la calidad de su agua beber. Tradúzcalo o hable con alguien que lo entienda bien. (This pamphlet contains important information about your drinking water. Please have this information translated.)

TABLE DEFINITIONS

AL: Action Level. The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

BDL: Below Detection Levels. Laboratory analysis indicates that the contaminant is not present.

MCL: Maximum Contaminant Level. The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

MCLG: Maximum Contaminant Level Goal. The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

mg/L: Milligrams per liter or parts per million, ppm.

MRDL: Maximum Residual Disinfectant Level. The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

MRDLG: Maximum Residual Disinfectant Level Goal. The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

n/a: Not applicable. Does not apply.

NTU: Nephelometric Turbidity Unit. A measure of the clearness or clarity of water. Turbidity is monitored because it is a good indicator of the effectiveness of the filtration system.

pCi/L: Picocuries per liter. A measure of the radioactivity in water.

ppb: Parts per billion or micrograms per liter, µg/L.

ppm: Parts per million or milligrams per liter, mg/L.

ppt: Parts per trillion or nanograms per liter, ng/L.

RAA: Running Annual Average.

TOC: Total Organic Carbon.

TT: Treatment Technique. A required process intended to reduce the level of a contaminant in drinking water.

µg/L: Micrograms per liter or parts per billion, ppb.